

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT**

**Issued under 401 KAR 52:030**

**Permittee Name:** BP Products (North America), Inc.  
**Mailing Address:** 4421 Bradley Road, Cleveland, OH 44109

**Source Name:** BP Products (North America), Inc. - Bromley Pipeline Facility  
**Mailing Address:** 4421 Bradley Road  
Cleveland, OH 44109

**Source Location:** 409 River Road (KY, Route 8)  
Bromley, KY 41017

**Permit Number:** F-04-034  
**Source A. I. #:** 2446  
**Activity #:** APE20040002  
**Review Type:** Construction/Operating, Conditional Major  
**Source ID #:** 21-117-00016

**Regional Office:** Florence Regional Office  
8020 Veteran's Memorial Drive, Suite 110  
Florence, KY 41042  
(859) 525-4923

**County:** Kenton

**Application**  
**Complete Date:** September 29, 2004  
**Issuance Date:** TBD  
**Expiration Date:** TBD

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**John S. Lyons, Director  
Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **External Floating Roof Tanks**

#### **01 (9010)      Petroleum Storage Tank #1**

**Description:** Fugitive Emissions  
External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 80 feet  
Maximum Capacity: 1,568,700 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1939

#### **02 (9020)      Petroleum Storage Tank #2**

**Description:** Fugitive Emissions  
External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 100 feet  
Maximum Storage Capacity: 2,481,906 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1940

#### **03 (9030)      Petroleum Storage Tank #3**

**Description:** Fugitive Emissions  
External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 100 feet  
Maximum Storage Capacity: 2,517,228 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1940

#### **06 (9060)      Petroleum Storage Tank #6**

**Description:** Fugitive Emissions  
External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 67 feet  
Maximum Storage Capacity: 1,097,838 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1953

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****External Floating Roof Tanks (Continued)****07 (9070)      Petroleum Storage Tank #7****Description:** Fugitive Emissions

External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.

Tank Diameter: 90 feet

Maximum Storage Capacity: 1,846,992 gallons

Maximum Hourly Fill Rate: 70,560 gal/hr

Construction Date: 1953

**08 (9080)      Petroleum Storage Tank #8****Description:** Fugitive Emissions

External (Domed, Welded) Floating Roof Tank with Primary and Secondary Seals  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.

Tank Diameter: 120 feet

Maximum Storage Capacity: 3,519,348 gallons

Maximum Hourly Fill Rate: 70,560 gal/hr

Construction Date: 1944

**APPLICABLE REGULATIONS:**

401 KAR 61:050, *Existing Storage Vessels for Petroleum Liquids*, applies to petroleum liquid storage vessels that have storage capacities greater than 580 gallons, were constructed prior to April 9, 1972, and which are located in a county which is designated ozone nonattainment for any nonattainment classification except marginal.

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to each of the External Floating Roof Tanks. See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**1.      Operating Limitations:**

- a. The storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents. [401 KAR 61:050, Section 3(1)]
- b. The true vapor pressure of the petroleum liquid, as stored, may not exceed 574 mm Hg (11.1 psia) unless the storage vessel is equipped with a vapor recovery system, or equivalent. [401 KAR 61:050, Section 3(2)]
- c. The storage vessel shall be equipped with a permanent submerged fill pipe. [401 KAR 61:050, Section 3(3)]
- d. The external floating roof tanks shall be fitted with a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary seal). [401 KAR 61:050, Section 3(4)(a)1.]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****External Floating Roof Tanks (Continued)**

- e. There shall be no visible holes, tears, or other openings in the seal or any seal fabric. [401 KAR 61:050, Section 4(1)]
- f. All openings, except stub drains, shall be equipped with covers, lids, or seal so that: [401 KAR 61:050, Section 4(2)]
  - (1) The cover, lid, or seal is in the closed position at all times except during actual use;
  - (2) Automatic bleeder vents are closed at all times, unless the roof is floated off or landed on the roof leg supports; and
  - (3) Rim vents, if provided, are set to open if the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- g. The floating roof tanks shall meet the following additional requirements: [401 KAR 61:050, Section 4(3)]
  - (1) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.
  - (2) The gap area of gaps exceeding 0.32 cm (one-eighth (1/8) in) in width between the secondary seal and the tank wall shall not exceed 6.5 sq. cm./0.3 m of tank diameter (1.0 sq. in/ft).
  - (3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves shall provide a projection below the liquid surface.
  - (4) Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least ninety (90) percent of the area of the opening.

**Compliance Demonstration Method:** See the **Testing, Monitoring, Recordkeeping, and Reporting Requirements**, below.

2. **Emission Limitations:** See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

3. **Testing Requirements:**

- a. Determine the primary seal condition and uniformity, and maximum gap widths and gap areas between the secondary seal and the tank wall according to the following frequency:
  - (1) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****External Floating Roof Tanks (Continued)**

- (2) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.
    - (3) If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of the primary and secondary seal gap measurements.
  - b. Determine gap widths in the primary and secondary seals individually by the following procedures:
    - (1) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
    - (2) Measure seal gaps around the entire circumference of the tank in each place where a 1/8-inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.
  - c. The total surface area of each gap described in paragraph **3.b.(2)**, above, shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
  - d. Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. For primary seals, the resultant ratio can be used as a record of seal uniformity required by **Operating Limitation 1.g.(1)**. For secondary seals, compare each ratio to the standard in **Operating Limitation 1.g.(2)**.
- 4. **Specific Monitoring Requirements:** The **Specific Recordkeeping Requirements**, below, dictate the monitoring requirements.
- 5. **Specific Recordkeeping Requirements:**
  - a. For each tank maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.
  - b. Records of each gap measurement at the plant shall identify the vessel on which the measurement was performed, the date of the seal gap measurement, the raw data obtained in the measurement process required by paragraph **3.b.**, above, and the calculation required by paragraph **3.d.**, above.
- 6. **Specific Reporting Requirements:**
  - a. If either the primary seal gap is non-uniform, or if the secondary seal gap calculated in accordance with paragraph **3.d.**, above, exceeds operating limits, then a report shall be furnished to the Florence Regional Office within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet specifications. The report shall also describe the actions necessary to bring the storage vessel into compliance.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **External Floating Roof Tanks (Continued)**

- b. Provide the Florence Regional Office 30 days prior notice of gap measurements to afford the Division the opportunity to have an observer present.
  - c. Provide the Florence Regional Office 30 days prior notice of tank degassing to afford the Division the opportunity to have an observer present.
  - d. The permittee shall submit a report of the following information to the Division for Air Quality's Florence office in accordance with **Section F.5.** and **F.6.** of this permit:
    - (1) Summary reports of all monitoring.
    - (2) Any exceedance of vapor pressure when the storage vessel is not equipped with a vapor recovery system, or its equivalent.
    - (3) The results of semiannual inspections of each storage vessel.
    - (4) Any routine maintenance performed on each storage vessel.
7. **Specific Control Equipment Operating Conditions:** None.
8. **Alternate Operating Scenarios:** None.



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Vertical Fixed Roof Tanks****04 (9040)      Petroleum Storage Tank #4**

**Description:** Fugitive Emissions  
Vertical Fixed Roof Tank  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of No. 2 distillate fuel oil (i.e., diesel fuel).  
Tank Diameter: 120 feet  
Maximum Storage Capacity: 3,171,000 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1940

**05 (9050)      Petroleum Storage Tank #5**

**Description:** Fugitive Emissions  
Vertical Fixed Roof Tank  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of No. 2 distillate fuel oil (i.e., diesel fuel).  
Tank Diameter: 80 feet  
Maximum Storage Capacity: 764,400 gallons  
Maximum Hourly Fill Rate: 70,560 gal/hr  
Construction Date: 1966

**APPLICABLE REGULATIONS:**

401 KAR 61:050, *Existing Storage Vessels for Petroleum Liquids*, applies to petroleum liquid storage vessels that have storage capacities greater than 580 gallons, were constructed prior to April 9, 1972, and which are located in a county which is designated ozone nonattainment for any nonattainment classification except marginal.

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to each of the Vertical Fixed Roof Tanks. See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**1.      Operating Limitations:**

- a.      The true vapor pressure of the petroleum liquid, as stored, may not exceed 78 mm Hg (1.5 psia) unless the storage vessel is equipped with a floating roof, a vapor recovery system, or their equivalents. [401 KAR 61:050, Section 3(1)]
- b.      The true vapor pressure of the petroleum liquid, as stored, may not exceed 574 mm Hg (11.1 psia) unless the storage vessel is equipped with a vapor recovery system, or equivalent. [401 KAR 61:050, Section 3(2)]
- c.      The storage vessel shall be equipped with a permanent submerged fill pipe. [401 KAR 61:050, Section 3(3)]

**Compliance Demonstration Method:** See the **Monitoring, Recordkeeping, and Reporting Requirements**, below.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Vertical Fixed Roof Tanks (Continued)**

2. **Emission Limitations:** See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.
3. **Testing Requirements:** None.
4. **Specific Monitoring Requirements:** The **Specific Recordkeeping Requirements**, below, dictate the monitoring requirements.
5. **Specific Recordkeeping Requirements:** For each tank maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.
6. **Specific Reporting Requirements:**  
The permittee shall submit a report of the following information to the Division for Air Quality's Florence office in accordance with **Section F.5.** and **F.6.** of this permit:
  - a. Summary reports of all monitoring,
  - b. Any exceedance of vapor pressure when the storage vessel is not equipped with a vapor recovery system, or its equivalent,
  - c. The results of semiannual inspections of each storage vessel, and
  - d. Any routine maintenance performed on each storage vessel.
7. **Specific Control Equipment Operating Conditions:** None.
8. **Alternate Operating Scenarios:** None.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Internal Floating Roof Tanks****09 (9110)      Petroleum Storage Tank #9**

**Description:** Fugitive Emissions  
Internal Floating Roof Tank with Primary Seal  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 20 feet  
Maximum Storage Capacity: 37,380 gallons  
Maximum Hourly Fill Rate: 61,950 gal/hr  
Construction Date: 1974

**10 (9120)      Petroleum Storage Tank #10**

**Description:** Fugitive Emissions  
Internal Floating Roof Tank with Primary Seal  
Material Storage: Petroleum products with maximum true vapor pressures equal to or less than the vapor pressure of gasoline.  
Tank Diameter: 20 feet  
Maximum Storage Capacity: 30,282 gallons  
Maximum Hourly Fill Rate: 61,950 gal/hr  
Construction Date: 1980

**APPLICABLE REGULATIONS:**

401 KAR 59:050, *New Storage Vessels for Petroleum Liquids*, applies to petroleum liquid storage vessels that have storage capacities less than 40,000 gallons and for which construction commenced on or after April 9, 1972 and prior to July 24, 1984, and which are located in either (a) a county which is designated ozone nonattainment or (b) in any other county if it is part of a major source of VOC.

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to each of the Internal Floating Roof Tanks. See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**1.      Operating Limitations:**

- a. Each storage vessel shall be equipped with a permanent submerged fill pipe. [401 KAR 59:050, Sections 3(2)]
- b. There shall be no visible holes, tears, or other openings in the seal, any seal fabric, shoe, or seal envelope. [401 KAR 59:050, Section 4(1)]
- c. All openings, except stub drains, automatic bleeder vents, rim space vents, and leg sleeves shall be equipped with covers, lids, or seal so that: [401 KAR 59:050, Section 4(2)(a) – (c)]
  - (1) The cover, lid, or seal is in the closed position at all times (i.e., no visible gap) except when in actual use or as described in subsection 3(f) of this section;

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Internal Floating Roof Tanks (Continued)**

- (2) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
  - (3) Rim vents, if provided, are set to open if the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
- d. Emission Point **10 (9120) Petroleum Storage Tank #10** shall meet the following additional requirements: [401 KAR 59:050, Section 4(3)(a), (e), and (f)]
  - (1) The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished in the minimum time necessary.
  - (2) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface.
  - (3) Each emergency roof drain associated with an external floating roof tank is to be provided with a slotted membrane fabric cover that covers at least ninety (90) percent of the area of the opening.

**Compliance Demonstration Method:** See the **Monitoring, Recordkeeping, and Reporting Requirements**, below.

- 2. **Emission Limitations:** See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.
- 3. **Testing Requirements:** None.
- 4. **Specific Monitoring Requirements:** The **Specific Recordkeeping Requirements**, below, dictate the monitoring requirements.
- 5. **Specific Recordkeeping Requirements:**  
For each tank:
  - a. Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [401 KAR 59:010, Section 5(1)]
  - b. Available data on the typical Reid vapor pressure and the maximum expected storage temperatures of the stored product may be used to determine the maximum true vapor pressure. [401 KAR 59:010, Section 5(2)]
  - c. The true vapor pressure of each type of crude oil if the estimated true vapor pressure is greater than 1.0 psia. [401 KAR 59:010, Section 5(3)]
- 6. **Specific Reporting Requirements:**  
The permittee shall submit a report of the following information to the Division for Air Quality's Florence office in accordance with **Section F.5.** and **F.6.** of this permit:

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**Internal Floating Roof Tanks (Continued)**

- a. Summary reports of all monitoring,
  - b. The results of semiannual inspections of each storage vessel, and
  - c. Any routine maintenance performed on each storage vessel.
7. **Specific Control Equipment Operating Conditions:** None.
8. **Alternate Operating Scenarios:** None.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading****11 (11) Distillate Fuel Oil Barge Loading****Description:** Fugitive Emissions

Maximum Annual Throughput: 85,000,000 gallons

Maximum Capacity: 168,000 gal/hr

Construction Date: December 1986

**11 (12) Gasoline Barge Loading****Description:** Stack Emissions (through the Vapor Recovery Unit)

Maximum Annual Throughput: 411,600,000 gallons

Maximum Capacity: 168,000 gal/hr

Construction Date: December 1986

Modification Date: 2005, Anticipated

Modification: Permitted throughput increase and installation of control device

**Control:** Vapor Recovery Unit (VRU) for Gasoline Barge Loading only.

Model: HAM/Z-2500-825-8-8-5

Manufacturer: John Zink

Description: Two granular activated carbon beds with vacuum regeneration.

Date constructed: 2005 (Anticipated)

**APPLICABLE REGULATIONS:**

401 KAR 63:002, incorporating by reference 40 CFR 63, Subpart Y, *National Emission Standards for Marine Tank Vessel Loading Operations*, applies to both Distillate and Gasoline Barge Loading operations. The only applicable requirements are the emission estimation procedures of 40 CFR 63.565(l) and the recordkeeping requirements of 40 CFR 63.567(j)(4).

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to Barge Loading operations. See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

**NON-APPLICABLE REGULATIONS:**

The Bromley Pipeline Facility has requested voluntary limits to preclude the applicability of the RACT standards provided in 40 CFR 63, Subpart Y, *National Emission Standards for Marine Tank Vessel Loading Operations*.

The Bromley Pipeline Facility has requested voluntary limits to preclude the applicability of 401 KAR 52:020 and the MACT emission standards provided in 40 CFR 63, Subpart Y, *National Emission Standards for Marine Tank Vessel Loading Operations*.

**1. Operating Limitations:**

- a. The annual throughput of distillate fuel oil through **11 (11) Distillate Fuel Oil Barge Loading** shall not exceed 85,000,000 gallons per year (2,023,809 bbl/yr) based on a twelve (12) month rolling total.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

- b. The annual throughput of gasoline through **11 (12) Gasoline Barge Loading** shall not exceed 411,600,000 gallons per year (9,800,000 bbl/yr) based on a twelve (12) month rolling total.
- c. The **11 (12) Gasoline Barge Loading** shall utilize a vapor recovery unit (VRU) to control VOC and HAP emissions from the marine terminal while loading gasoline. The VRU shall achieve a minimum overall capture and control efficiency of at least 95% by weight.
- d. The **11 (12) Gasoline Barge Loading** shall be limited to those vessels that are equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
- e. The **11 (12) Gasoline Barge Loading** shall be limited to those vessels that are vapor tight and those vessels that are connected to the VRU.
- f. During **11 (12) Gasoline Barge Loading**, each valve in the terminal's vapor collection system that would route displaced vapors to the atmosphere, either directly or indirectly, shall be secured closed during marine tank vessel loading operations either by using a car-seal or a lock-and-key type configuration, or the by-pass line from the valve shall be equipped with a flow indicator, except for those valves used for pressure/vacuum relief, analyzers, instrumentation devices, sampling, and venting for maintenance. Marine tank vessel loading operations shall not be performed with open by-pass lines.

**Compliance Demonstration Method:**

- a. Every month the permittee shall calculate the total amount of distillate fuel oil loaded through **11 (11) Distillate Fuel Oil Barge Loading** for the previous twelve (12) months using the following equation:

$$\text{Distillate Fuel Oil loaded per year} = \sum_{m=1}^{12} D_m$$

Where  $D_m$  = monthly amount of distillate fuel oil throughput loaded in gallons ( $m = 1, 2 \dots 12$  months).

- b. Every month the permittee shall calculate the total amount of gasoline loaded through **11 (12) Gasoline Barge Loading** for the previous twelve (12) months using the following equation:

$$\text{Gasoline loaded year} = \sum_{m=1}^{12} G_m$$

Where  $G_m$  = monthly amount of gasoline throughput loaded in gallons ( $m = 1, 2 \dots 12$  months).

- c. Compliance with the VRU control efficiency limitation will be demonstrated through the **Testing Requirements**, below.
- d. The permittee shall calculate an annual estimate of HAP emissions, excluding commodities exempted by 40 CFR 63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. [40 CFR 63.565(l)]

- e. Compliance with the barge vapor tightness requirements for **11 (12) Gasoline Barge Loading** operations will be demonstrated by following Compliance Demonstration Method **e.(1)**, **e.(2)**, **e.(3)**, or **e.(4)** of this section.

(1) *Pressure test documentation for determining vapor tightness of the marine vessel.* A copy of the vapor-tightness pressure test documentation described in paragraph **5.j.**, below, shall be provided for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in paragraph **3.k.**, below. Following the date on which the initial performance test is completed, check vapor-tightness pressure test documentation for marine tank vessels loaded at positive pressure.

(2) *Leak test documentation for determining vapor tightness of the marine vessel.* If no documentation of the vapor tightness pressure test as described in Compliance Demonstration Method **e.(1)** of this section is available, the leak test documentation described in paragraph **5.j.**, below, shall be provided for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in paragraph **3.l.**, below. If the marine tank vessel has failed its most recent vapor-tightness leak test at that terminal, documentation that the leaks detected during the previous vapor-tightness test have been repaired and documented with a successful vapor-tightness leak test described in paragraph **3.l.**, below, conducted during loading must be provided. If it can be documented that repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the marine tank vessel may be loaded. Following the date on which the initial performance test is completed, check the vapor-tightness leak test documentation for marine tank vessels loaded at positive pressure.

(3) *Leak test performed during loading using Method 21 for determining vapor tightness of the marine vessel.* If no documentation of vapor tightness as described in Compliance Demonstration Method **e.(1)**, or **e.(2)** of this section is available, a leak test of the marine tank vessel shall be performed during the marine tank vessel loading operation using the procedures described in paragraph **3.l.**, below.

(A) If no leak is detected, documentation must be completed as described in paragraph **5.j.**, below, prior to departure of the vessel.

(B) If a leak is detected, the vapor-tightness failure for the marine tank vessel must be documented prior to departure of the vessel. The leaking component shall be repaired prior to the next marine tank vessel loading operation at a controlled terminal unless the repair is



**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

technically infeasible without cleaning and gas freeing or dry-docking the vessel. If it can be documented that repair of such equipment is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the equipment responsible for the leak will be excluded from future Method 21 tests until repairs are effected. A copy of this documentation shall be maintained. Repair of the equipment responsible for the leak shall occur the next time the vessel is cleaned and gas freed or dry-docked. For repairs that are technically feasible without dry-docking the vessel, the vessel shall not be loaded again unless it can be documented that the equipment responsible for the leak has been repaired.

- (4) *Negative pressure loading.* Vapor tightness of marine tank vessels may be demonstrated by loading the product tank below atmospheric pressure (i.e., at negative gauge pressure). The pressure shall be measured between the facility's vapor connection and its manual isolation valve, and the measured pressure must be below atmospheric pressure. Following the date on which the initial performance test is completed, marine tank vessel loading operations for nonvapor-tight vessels must be performed below atmospheric pressure (i.e., at negative gauge pressure) in the product tank.

2. **Emission Limitations:** See **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS** for source-wide requirements.

3. **Testing Requirements:**

- a. Pursuant to 401 KAR 50:045, Section 1, the permittee shall conduct performance testing on the VRU in accordance with **Section G(d)** of this permit in order to determine the control efficiency of the VRU.
- b. The performance testing shall be performed during the last 20 percent of loading a tank or compartment.
- c. The emission testing intervals shall consist of five (5) minute periods during the performance test. For each interval, the following shall be performed:
  - (1) Readings from each measurement instrument shall be recorded
  - (2) Method 1 or 1A, Appendix A, of 40 CFR 60 shall be used for selection of sampling sites. Sampling sites shall be located at the inlet and outlet of the VRU.
  - (3) The volume exhaust shall be determined using Method 2, 2A, 2C, or 2D, Appendix A, of 40 CFR 60, as appropriate.
- d. The average VOC concentration in the vent upstream and downstream of the VRU shall be determined using Method 25A, Appendix A, of 40 CFR 60. The average VOC concentration shall correspond to the volume measurement by taking into account the sampling system response time.

## SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Barge Loading (Continued)

- e. The VOC mass at the inlet and outlet of the VRU during each testing interval shall be calculated using the following equation:

$$M_j = FKV_s C_{VOC}$$

Where:

$M_j$  = mass of VOC at the inlet and outlet of the VRU during testing interval  $j$ , kilograms (kg);

$F = 10^{-6}$  = conversion factor ( $m^3$  VOC/ $m^3$  air) (1/ppmv) ( $m^3$  VOC/ $m^3$  air) (1/ppmv);

$K$  = density, ( $kg/m^3$  VOC), standard conditions, 20°C and 760 mmHg;

$V_s$  = volume of air-vapor mixture at the inlet and outlet of the VRU, ( $m^3$ ) at standard conditions, 20°C and 760 mmHg;

$C_{VOC}$  = VOC concentration as measured at the inlet and outlet of the VRU, (ppmv, dry basis).

- f. The VOC mass emission rates at the inlet and outlet of the VRU shall be calculated as follows:

$$E_i = \frac{\sum_{j=1}^n M_{ij}}{T}$$

$$E_o = \frac{\sum_{j=1}^n M_{oj}}{T}$$

Where:

$E_i$ ,  $E_o$  = mass flow rate of VOC at the inlet (i) or outlet (o) of the VRU, (kg/hr);

$M_{ij}$ ,  $M_{oj}$  = mass of VOC at the inlet (i) or outlet (o) during testing interval  $j$ , (kg);

$T$  = total time of all testing intervals, (hr);

and  $n$  = number of testing intervals.

- g. The percent reduction across the VRU shall be calculated as follows:

$$R = \frac{E_i - E_o}{E_i} (100\%)$$

Where:

$R$  = control efficiency of the VRU, (percent);

$E_i$  = mass flow rate of VOC at the inlet to the VRU as calculated under Item f. above, (kg/hr); and

$E_o$  = mass flow rate of VOC at the outlet to the VRU as calculated under Item f. above, (kg/hr).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

- h. The permittee shall repeat the procedures in Items b. through g. (above) three (3) times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the VRU.
- i. Since vacuum regeneration will be utilized on the VRU's carbon beds, the testing procedure described above in Items b. through h. must be conducted once per year.
- j. The permittee shall verify the accuracy of the pressure device required by paragraph 7.f., below, once each calendar year with a reference pressure monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent pressure measurement device dedicated for this purpose). During the accuracy check, the probe of the reference device shall be at the same location as that of the pressure monitor being tested.
- k. *Pressure test for the marine tank vessel.* These procedures shall be used in conjunction with Compliance Demonstration Method e.(1), above.
  - (1) Each product tank shall be pressurized with dry air or inert gas to no more than the pressure of the lowest pressure relief valve setting.
  - (2) Once the pressure is obtained, the dry air or inert gas source shall be shut off.
  - (3) At the end of one-half hour, the pressure in the product tank and piping shall be measured. The change in pressure shall be calculated using the following formula:

$$P=P_i-P_f$$

Where:

P=change in pressure, inches of water.

P<sub>i</sub>=pressure in tank when air/gas source is shut off, inches of water.

P<sub>f</sub>=pressure in tank at the end of one-half hour after air/gas source is shut off, inches of water.

- (4) The change in pressure, P, shall be compared to the pressure drop calculated using the following formula:

$$PM=0.861 P_{ia} L/V$$

Where:

PM=maximum allowable pressure change, inches of water.

P<sub>ia</sub>=pressure in tank when air/gas source is shut off, psia.

L=maximum permitted loading rate of vessel, barrels per hour.

V=total volume of product tank, barrels.

- (5) If  $P \leq PM$ , the vessel is vapor tight.
- (6) If  $P > PM$ , the vessel is not vapor tight and the source of the leak must be identified and repaired prior to retesting.
- l. *Leak test for the marine tank vessel.* Method 21 shall be used as the vapor-tightness leak test for marine tank vessels in conjunction with Compliance Demonstration Method e.(2), and e.(3), above. The test shall be conducted during the final 20

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

percent of loading of each product tank of the marine vessel, and it shall be applied to any potential sources of vapor leaks on the vessel.

4. **Specific Monitoring Requirements:** The **Specific Recordkeeping Requirements**, below, dictate the monitoring requirements.

5. **Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information:

- a. The monthly and rolling twelve (12) month totals of distillate fuel oil loaded through **11 (11) Distillate Fuel Oil Barge Loading** each month.
- b. The monthly and rolling twelve (12) month totals of gasoline loaded through **11 (12) Gasoline Barge Loading** each month.
- c. The annual emission estimates determined in Compliance Demonstration Method 1.d., above, and records of the facility's actual throughputs by commodity for 5 years. [40 CFR 63.567(j)(4)]
- d. Daily records of the proper operation of the VRU in accordance with paragraph 7. **Source Control Equipment Requirements**, below.
- e. The occurrence, duration, cause, and any corrective action taken for each incident when the **11 (12) Gasoline Barge Loading** is in operation, but the VRU is not operating in accordance with paragraph 7. **Source Control Equipment Requirements**, below.
- f. The regeneration time for carbon bed regeneration.
- g. Continuous records of the vacuum pressure of the carbon bed regeneration cycle.
- h. The time when the carbon bed regeneration cycle begins and when the cycle ends for a single carbon bed.
- i. Output from a data acquisition system that shall compute and record a 3-cycle (carbon bed regeneration cycle) Block Average Regeneration Time and Vacuum Pressure every third cycle.
- j. *Vapor tightness test documentation for marine tank vessels.* A documentation file shall be maintained for each marine tank vessel loaded at that source to reflect current test results as determined by the appropriate method in paragraph 3.k. or 3.l., above. Updates to this documentation file shall be made at least once per year. The owner or operator shall include, as a minimum, the following information in this documentation:
  - (1) Test title;
  - (2) Marine vessel owner and address;
  - (3) Marine vessel identification number;
  - (4) Loading time, according to Compliance Demonstration Method e.(2) or e.(3), above, if appropriate;
  - (5) Testing location;
  - (6) Date of test;
  - (7) Tester name and signature;

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

- (8) Test results from paragraph **3.k.** or **3.l.**, above, as appropriate;
- (9) Documentation provided under Compliance Demonstration Method **e.(2)** or **e.(3)(B)**, above, showing that the repair of leaking components attributed to a failure of a vapor-tightness test is technically infeasible without dry-docking the vessel; and
- (10) Documentation that a marine tank vessel failing a pressure test or leak test has been repaired.

**6. Specific Reporting Requirements:**

In accordance with **SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS** the permittee shall submit the following reports to the Division for Air Quality's Florence office:

- a. The monthly and rolling twelve (12) month totals of distillate fuel oil loaded through **11 (11) Distillate Fuel Oil Barge Loading**.
- b. The monthly and rolling twelve (12) month totals of gasoline loaded through **11 (12) Gasoline Barge Loading**.
- c. A record of monthly inspections, routine maintenance performed, and any corrective action on the VRU.
- d. The occurrence, duration, cause, and any corrective action taken for each incident when the **11 (12) Gasoline Barge Loading** is in operation but the VRU is not operating in accordance with paragraph 7. **Specific Control Equipment Operating Conditions**, below.

**7. Specific Control Equipment Operating Conditions:**

- a. The VRU shall control VOC's and HAP's from the **11 (12) Gasoline Barge Loading** and shall be operated properly in accordance with the manufacturer's specifications and the standard operating procedures at all times gasoline is loaded through **11 (12) Gasoline Barge Loading**.
- b. The manufacturer's specifications and the standard operating procedures shall be located on site at all times.
- c. Desorbed hydrocarbons from regeneration of the off-line carbon bed shall be vented to the on-line carbon bed.
- d. The Baseline Regeneration Time shall be the manufacturer recommended minimum regeneration time for the vacuum stage of carbon bed regeneration.
- e. The VRU shall be operated with the Block Average Regeneration Time of the vacuum stage of the carbon bed regeneration, as determined in paragraph **5.h.**, above, no more than 20% below the Baseline Regeneration Time.
- f. The Baseline Vacuum Pressure shall be the manufacturer recommended minimum vacuum pressure for carbon bed regeneration.
- g. The VRU shall be operated with the Block Average Vacuum Pressure (negative gauge pressure), as determined in paragraph **5.h.**, above, to no more than 20% above the Baseline Vacuum Pressure.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Barge Loading (Continued)**

- h. The permittee shall install, maintain, calibrate, and operate a recording pressure measurement device (magnehelic gauge or equivalent device).

**8. Alternate Operating Scenarios:**

The annual throughput of gasoline through the **11 (12) Gasoline Barge Loading** shall not exceed 42,380,000 gallons per year based on a twelve (12) month rolling total prior to compliance demonstration of the VRU.

**Compliance Demonstration Method:**

The permittee shall monitor and maintain records of the monthly and rolling twelve (12) month totals of gasoline loaded through **11 (12) Gasoline Barge Loading** as mentioned in paragraph **5.b**, above.

**Rolling Twelve (12) Month Total of Gasoline**

Every month the permittee shall calculate the total amount of gasoline loaded **through 11 (12) Gasoline Barge Loading** for the previous twelve (12) months using the following equation:

$$\text{Gasoline loaded through } \mathbf{11 (12) Gasoline Barge Loading} \text{ per year} = \sum_{m=1}^{12} G_m$$

Where  $G_m$  = monthly amount of gasoline throughput loaded in gallons ( $n = 1, 2 \dots 12$  months).

## SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
<b>12 (--)</b> Valves, Pumps, Connectors, and Others (Fugitive Emissions)	401 KAR 63:010

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
3. **Source Emission Limitations:**
  - a. The total annual source-wide emissions shall not exceed the following limitations on a twelve month (12) rolling total:
    - (1) Volatile organic compound (VOC) emissions shall not exceed 90 tons per year.
    - (2) Emissions of any single hazardous air pollutants (HAP) shall not exceed 9 tons per year.
    - (3) Emissions of combined hazardous air pollutant (HAP's) shall not exceed 22.5 tons per year.
  - b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

**Compliance Demonstration Method:**

- a. Calculate annual source-wide emissions from all storage and loading operations for each month of the previous 12-month period (i.e.: for the month of January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January). The monthly compliance demonstration shall include, at a minimum, the following:
  - (1) The monthly and 12-month rolling gasoline throughput at the barge loading facility.
  - (2) The monthly and 12-month rolling distillate throughput at the barge loading facility.
  - (3) The monthly and 12-month rolling VOC, individual HAP, and combined HAP emissions from the following operations:
    - (a) 11 (11) Distillate Barge Loading
    - (b) 11 (12) Gasoline Barge Loading
    - (c) Domed External Floating Roof Tank 01 (9010)
    - (d) Domed External Floating Roof Tank 02 (9020)
    - (e) Domed External Floating Roof Tank 03 (9030)
    - (f) Domed External Floating Roof Tank 06 (9060)
    - (g) Domed External Floating Roof Tank 07 (9070)
    - (h) Domed External Floating Roof Tank 08 (9080)
    - (i) Vertical Fixed Roof Tank 04 (9040)
    - (j) Vertical Fixed Roof Tank 05 (9050)



## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

(k) Internal Floating Roof Tank 09 (9110)

(l) Internal Floating Roof Tank 10 (9120)

All emissions calculations shall be based on standard USEPA methodology (i.e.: the most current TANKS program for tanks, AP-42 emissions factors for material loading, appropriately summing the product of the weight percent of each HAP in the organic material emissions for each organic material emissions attributable to the storage and handling of that liquid, etc.).

- b. Demonstration of compliance with the source-wide emission limitations in paragraph **3.a.**, above, shall also serve as the demonstration of compliance with the air toxic limitation in paragraph **3.b.**, above.
4. **Source Recordkeeping Requirements:** The permittee shall retain a record of each source-wide monthly compliance demonstration completed in accordance with paragraph **3.a.**, above.
5. **Source Reporting Requirements:**  
The permittee shall submit a report of the following information to the Division for Air Quality's Florence office in accordance with **Section F.5.** and **F.6.** of this permit:
  - a. A summary report containing a copy of all monthly source-wide compliance demonstration records (as provided above) during the previous reporting period.
  - b. Identification of any deviations from source-wide permit requirements that occurred during the reporting period.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. **Annual compliance certifications should be mailed to the following addresses:**

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

Division for Air Quality  
Florence Regional Office  
8020 Veteran's Memorial Dr.  
Florence, KY 41042

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.
12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
  - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - i. The size and location of both the original and replacement units; and
    - ii. Any resulting change in emissions;
  - b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - i. Re-install the original unit and remove or dismantle the replacement unit; or
    - ii. Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in this permit; and
  - b. Non-applicable requirements expressly identified in this permit.
18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.



**SECTION G - GENERAL PROVISIONS (CONTINUED)****(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the Vapor Recovery Unit used in conjunction with **11 (12) Gasoline Barge Loading** in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the final permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7, and 8 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test***

## SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof[401 KAR 52:030 Section 23(2)].

### (g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

See **Section B** for the Alternate Operating Scenario specific to Barge Loading Operations.

## **SECTION I - COMPLIANCE SCHEDULE**

None.